

Serial No. : 10/664,593  
Applicant : Michael Kuhn  
Page : 6

#### REMARKS

Applicant acknowledges the Examiner's review of the specification, claims, and drawings. In light of the above amendments and following remarks, Applicant respectfully requests reconsideration of the present application. The amendments and remarks presented herein are fully supported by the application as originally filed. No new matter has been entered.

#### STATUS OF THE CLAIMS:

Claims 1-14 were pending in the application. Claims 1, 8 and 10 have been amended and claims 15-24 have been added. Claims 6, 7 and 11-14 have been cancelled. Claims 1-5, 8-10, and 15-24 remain pending in the application.

#### COMPLIANCE OF INFORMATIONAL DISCLOSURE STATEMENT WITH 37 C.F.R. §1.98:

The Office Action states that the IDS filed on March 3, 2004, fails to comply with 37 C.F.R. §1.98(a)(3)(i) and (ii). The IDS listed European reference EP 0802129 A2 and German reference DE 678,838

Included with the IDS was a copy of a European Search Report conducted in regard to a corresponding European patent application. The European Search Report listed the above two references and indicated their relevancy by way of the letters "X" and "Y" in a column next to the listed references. MPEP §609(III)(A)(3) states that the requirement for a concise explanation of relevance for non-English information listed on an IDS, where the information was cited in a search report by a foreign patent office in a counterpart foreign application, can be satisfied by submitting the search report if the relevancy of the cited references is indicated on the search report by an "X", "Y", or "A".

Applicant submits that the IDS filed on March 3, 2004, complies with MPEP §609 and, therefore, with 37 C.F.R. §1.98. Enclosed herewith, for additional reference, is an English abstract of European reference EP 0802129 A2 and an English translation of the claims of DE 678,838.

The application filed on September 17, 2003, also included a discussion of German reference DE 4407163 C1 on pages one and two of the specification. An Information Disclosure Statement is enclosed submitting this reference and including a copy therewith. In light of this submission and the above comments, Applicant respectfully requests acknowledgement of the disclosed references.

Serial No. : 10/664,593  
Applicant : Michael Kuhn  
Page : 7

CLAIM REJECTIONS UNDER 35 U.S.C. §112:

The Office Action rejects claims 1-14 under 35 U.S.C. §112, 2nd paragraph, for being inaccurate. The Office Action takes the position that claim 1 is inaccurate because the electric drive connected to one deflecting wheel 9, discussed on page 5 of the specification, does not rotate the carrying roller.

Applicant respectfully notes that claims 6, 7 and 11-14 have been cancelled, thereby eliminating the rejection with respect to these claims. Claims 2-5 and 8-10 ultimately depend from claim 1. Therefore, the rejection of these claims will be addressed below in reference to claim 1.

Applicant respectfully traverses the rejection. The Office Action correctly states that the electric drive discussed on page 5 of the specification does not directly rotate the carrying roller. However, the drive called for in the last three lines of claim 1 is not the un-illustrated electric drive discussed on page 5. Rather, the drive of claim 1 comprises independent structure that causes the circumferential speed of the carrying roller to equal the running speed of the toothed conveying belt. Dependent claims 2-5 further specify and support an embodiment of the structure of this drive.

Applicant respectfully submits that claim 1 is not inaccurate for the above discussed reasons and respectfully requests a Notice of Allowance of claim 1, as well as allowance of claims 2-5 and 8-10, which ultimately depend from claim 1.

CLAIM REJECTIONS UNDER 35 U.S.C. §103:

The Office Action rejects claims 1-14 under 35 U.S.C. §103(a) as being unpatentable over European reference EP 0802129 A2 (the “‘129 reference”) in view of U.S. Patent 3,047,126 to Ebner. The Office Action takes the position that it would have been obvious to position support rollers 12 of European reference ‘129 higher so that belt 5 constantly engages and drives rollers 3, 4 as taught by idler rollers 70, belt 46, and rollers 44 of Ebner.

Applicant respectfully notes that claims 6, 7 and 11-14 have been cancelled, thereby eliminating the rejection with respect to these claims. Claims 2-5 and 8-10 ultimately depend from claim 1. Therefore, the rejection of these claims will be addressed below in reference to claim 1.

Applicant respectfully traverses the rejection. With respect to claim 1, claim 1 has been amended to more clearly define Applicant’s invention, which now calls for:

A conveying path for articles, in particular for baggage containers, said conveying path comprising:

at least two spaced-apart conveyors which support articles, said at least two spaced-apart conveyors running parallel in a conveying direction, at least one of said conveyors having a driven endlessly circulating conveying belt guided over deflecting wheels wherein the articles can be carried on a top side of a top strand of said conveying belt;

carrying rollers arranged one behind the other in the conveying direction, between the deflecting wheels in order to support the conveying belt;

a drive, said drive causing the circumferential speed of this carrying roller to equal the running speed of the conveying belt even if the top strand is not resting on the carrying roller;

wherein said conveying belt comprises a toothed belt.

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference or references when combined must teach or suggest all the claimed limitations. The teaching or suggestion to make the claim combination and reasonable expectation of success must both be found in the prior art and not based on Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). See MPEP § 2143.

Applicant respectfully submits that the conveying path for articles of claim 1 is not obvious over the '129 reference in view of Ebner as neither of these references suggest nor address a solution to the problem overcome by claim 1. The present invention, as described in detail in the specification, addresses the problem of wear on both the conveying belt and the carrying rollers. (Page 2, line 18 – page 3, line 29). This wear results when a constantly moving belt is initially separated from one or more of the carrying rollers due to manufacturing tolerances such that the circumferential velocity of the roller either slows or stops relative to the belt. When the belt subsequently re-engages the carrying roller, the roller slips against the belt until it accelerates to the velocity of the belt. In contrast, Ebner notes that the disclosed structure “may aid in moving the belt 46 in a linear manner.” (Column 3, lines 41-42). That is, the invention of claim 1 prevents frictional wear between a constantly moving belt and carrying rollers that causes premature failure of the belt and rollers while the Ebner reference notes the potential to aid movement of the belt, and thereby avoid jerking or hesitating transportation of items on the belt. Because they address different issues, the

structures disclosed by claim 1 and the cited references are correspondingly different, as discussed below and, therefore, claim 1 is not obvious over European reference '129 in view of Ebner.

Ebner, as shown in FIG. 2, discloses a plurality of rollers 44 supporting an upper run of conveyor belt 46. FIG. 2 discloses belt 46 as a flat belt and rollers 44 as smooth, drum rollers. FIG. 2 also discloses two idler rollers 70 located beneath the lower run of belt 46. As noted by the Examiner, Ebner indicates that idler rollers 70 support belt 46 "generally in close proximity to the lower surface of the rollers 44 and the lower tangential surface of certain of the rollers 44 may engage the lower run of the belt 46 and aid in moving the belt 46 in a linear manner." (Column 3, lines 38-42). That is, Ebner suggests a technique to maintain movement of the belt.

Applicant submits that, due to the flat belt 46 and smooth drum rollers 44, belt 46 may slip on rollers 44 such that belt 46 will not move in a linear manner, but rather would move in a jerky, hesitating manner. Engaging the lower run of belt 46 with selected rollers 44, as noted above, is meant to aid the belt in moving in a linear manner. That is, the contact disclosed in Ebner is not intended to prevent wear between belt 46 and rollers 44, but rather to ensure movement of belt 46. FIG. 2 offers further support to this position by disclosing that conveyor 10 includes fourteen rollers 44, not including the rollers 44 on either end, and only two idler rollers 70. As such, the lower run of belt 46 is shown to only contact four rollers 44, leaving ten rollers 44 that may lose contact with belt 46 and where, upon regaining contact, the rollers 44 and belt 46 may incur wear. Furthermore, Ebner does not even disclose that the lower run of belt 46 is sufficiently engaged with the four rollers 44 to maintain the circumferential speed of those rollers 44 and thereby inherently prevent wear between the four rollers 44 and the upper run of belt 46. Therefore, Applicant submits, Ebner does not teach or suggest a technique to prevent wear between carrying rollers and a conveying belt.

There is no motivation to employ the technique of Ebner to the '129 reference because belt 5 already moves in a linear fashion. The '129 reference discloses a toothed conveyor belt 5 that is guided over deflecting wheels 9 and supported by carrying rollers 4 that are located between deflecting wheels 9. FIG. 2 of the '129 reference discloses two support rollers 12 located below, and vertically spaced from, carrying rollers 4. The presence of teeth on belt 5 ensures that belt 5 will be driven in a constant, linear fashion such that the belt conveyor and items transported thereon will not move in a jerky, hesitating manner. Furthermore, the support roller 12 shown to the left in FIG. 2 is located directly below a

Serial No. : 10/664,593  
Applicant : Michael Kuhn  
Page : 10

carrying roller 4 such that, if this support roller 12 were positioned higher, it could actually pinch belt 5 and restrict the linear movement of belt 5.

Claim 1 specifies the use of a toothed conveying belt. The toothed conveying belt ensures that the belt will be driven in a constant, linear fashion such that the belt and items transported thereon will not move in a jerky, hesitating manner. Claim 1 further specifies a drive that causes the circumferential speed of the carrying roller to equal the running speed of the toothed conveying belt even if the top strand is not resting on the carrying roller. By maintaining the circumferential speed of the carrying roller, the drive of claim 1 thereby prevents wear between the belt and carrying roller when a belt that is separated from the carrying roller regains contact with the carrying roller. Therefore, Applicant respectfully submits that the conveying path for articles of claim 1 is not obvious over the '129 reference in view of Ebner.

With respect to claim 5, the Office Action takes the position that the criticality of the overlap has not been proven such that the overlap of idler rollers 70 and rollers 44 of Ebner are considered to be functionally equivalent. Applicant argues, however, that Ebner does not teach an overlap of idler rollers 70 and rollers 44. As shown in FIG. 8 of Ebner, idler roller 70 is positioned a vertical distance below roller 44 such that there is no vertical overlap of the outer surfaces of idler roller 70 and roller 44. Furthermore, the written specification only notes that "the lower tangential surface of certain of the rollers 44 may engage the lower run of the belt 46" (column 3, lines 39-41), and does not discuss the vertical relationship of idler rollers 70 to rollers 44.

In contrast, Applicant's specification specifically notes that an overlapping relationship of the pressure-exerting rollers 11 with the carrying rollers 4 "produces guidance for the bottom strand" of the belt and results in "reliable abutment of the inside of the bottom strand against the carrying roller." (Page 4, lines 13-16). The written specification further notes that "optimum action is achieved by an overlap . . . [of] 5 mm." (Page 4, lines 18-20).

Applicant respectfully submits, due to the lack of a teaching in Ebner of an overlap and the detailed description of the overlap in Applicant's specification, that the criticality of both the existence and the size of the overlap is evident.

With respect to claims 6 and 11-14, the Office Action takes the position that the criticality of the belt cross-sectional shape has not been proven. Claims 6 and 11-14 have been cancelled, thereby eliminating this issue with respect to those claims. However, as noted above, the toothed belts of claim 1 and the '129 reference ensure constant, linear

Serial No. : 10/664,593  
Applicant : Michael Kuhn  
Page : 11

movement of the belt such that the belt and items transported thereon do not move in a jerky, hesitating manner.

Applicant submits that the conveying path for articles of claim 1 is not obvious over the '129 reference in view of Ebner for the reasons discussed above and respectfully requests a Notice of Allowance of claim 1, as well as allowance of claims 2-5 and 8-10, which depend from claim 1.

NEW CLAIMS:

Claims 15-24 have been added and are now pending in the application.

Independent claim 15 includes all of the limitations of original claims 1 and 2. Claim 15 is as follows:

A conveying path for articles, in particular for baggage containers, said conveying path comprising:

at least two spaced-apart conveyors which support articles, said at least two spaced-apart conveyors running parallel in a conveying direction, at least one of said conveyors having a driven endlessly circulating conveying belt guided over deflecting wheels wherein the articles can be carried on a top side of a top strand of said conveying belt;

carrying rollers arranged one behind the other in the conveying direction, between the deflecting wheels in order to support the conveying belt; and

pressure-exerting rollers which are arranged parallel to said carrying rollers and press a bottom strand of said conveying belt in a frictionally locking manner, from beneath against said carrying rollers causing the circumferential speed of this carrying roller to equal the running speed of the conveying belt even if the top strand is not resting on the carrying roller.

Applicant respectfully submits that the conveying path for articles of claim 15 is patentably distinguishable over the prior art of record. Claim 15 specifies the use of pressure-exerting rollers that press a bottom strand of the conveying belt in a frictionally locking manner such that the circumferential speed of this carrying roller is equal to the speed of the conveying belt even if the top strand is not resting on the carrying roller. By maintaining the circumferential speed of the carrying roller, the conveying path for articles of claim 15 prevents wear between the belt and carrying roller when a belt that is separated from the carrying roller regains contact with the carrying roller. Therefore, claim 15 overcomes a problem that is neither addressed nor inherently solved by the art of record.

Serial No. : 10/664,593  
Applicant : Michael Kuhn  
Page : 12

Claims 16-20 depend from claim 15. Applicant submits that claim 15 is not obvious over the cited references such that claims 16-20, which depend from claim 15, are similarly not obvious.

Independent claim 21 includes all of the limitations of independent claim 15 and additionally specifies that each of the pressure-exerting rollers are arranged between the carrying rollers as called for in claim 3. Claim 21 is as follows:

A conveying path for articles, in particular for baggage containers, said conveying path comprising:

at least two spaced-apart conveyors which support articles, said at least two spaced-apart conveyors running parallel in a conveying direction, at least one of said conveyors having a driven endlessly circulating conveying belt guided over deflecting wheels wherein the articles can be carried on a top side of a top strand of said conveying belt;

carrying rollers arranged one behind the other in the conveying direction, between the deflecting wheels in order to support the conveying belt; and

pressure-exerting rollers which are arranged parallel to said carrying rollers and press a bottom strand of said conveying belt in a frictionally locking manner, from beneath against said carrying rollers;

wherein each of said pressure-exerting roller is arranged between said carrying rollers as seen in the conveying direction causing the circumferential speed of this carrying roller to equal the running speed of the conveying belt even if the top strand is not resting on the carrying roller.

Applicant respectfully submits that the conveying path for articles of claim 21 is patentably distinguishable over the art of record as these references do not suggest or address a solution to the problem overcome by claim 21. Claim 21 specifies arranging each pressure-exerting roller between the carrying rollers such that the belt is frictionally locked into engagement with the corresponding carrying rollers, thereby causing the circumferential speed of these carrying rollers to equal the running speed of the conveying belt, regardless of whether or not the top strand of the belt maintains contact with the carrying roller, and thus preventing wear between the belt and these carrying rollers.

The '129 reference does not disclose arranging a plurality of pressure-exerting rollers between carrying rollers to frictionally engage the conveying belt with the carrying rollers. Furthermore, although Ebner discloses a flat belt 46 it does not address the problem of wear between the belt and rollers 44, as discussed above. This is evident in FIG. 2 of Ebner, as previously noted, where the lower run of belt 46 does not come into contact with ten of the fourteen rollers 44. Therefore, Applicant submits there is no suggestion or motivation to

Serial No. : 10/664,593  
Applicant : Michael Kuhn  
Page : 13

modify the art of record, nor would such a modification address the problem overcome by claim 21.

Accordingly, Applicant respectfully submits that claim 21, along with claims 22-24 which depend from claim 21, are patentably distinguishable over the prior art of record.

In light of the above amendments and remarks, Applicant respectfully requests reconsideration of the present application and a Notice of Allowance of all claims.

Respectfully submitted,

MICHAEL KUHN

By: Van Dyke, Gardner, Linn  
& Burkhardt, LLP

Dated: December 16, 2004.



Karl T. Ondersma  
Registration No. 55 894  
2851 Charlevoix Drive, S.E., Suite 207  
Post Office Box 888695  
Grand Rapids, Michigan 49588-8695  
(616) 988-4104

KTO:wen  
MAN03 P-113